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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/671,611	09/29/2003	Rika Tanaka	00862.023251	8530
5514 7590 06/19/2007 FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			EXAMINER AUGUSTINE, NICHOLAS	
			ART UNIT 2179	PAPER NUMBER
			MAIL DATE 06/19/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/671,611	Applicant(s) TANAKA ET AL.	
	Examiner Nicholas Augustine	Art Unit 2179	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

- A. In response to the following communications: Amendment filed: 3/29/2007. This action is made **FINAL**.
- B. Claims 1-10 was amended. Claims 1-10 are pending.

Specification

1. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: "Computer-readable medium" in claims 9 and 10 is not defined in the specification.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-7,9,10 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Abbott (US 2002/0044152 A1).

As for independent claims 1-3 and 9-10, Abbott teaches a video combining method and corresponding apparatus, method and computer-readable medium for superimposing a virtual image generated by a computer on a real world observed by a user (figure 1-2), said method comprising the steps, means for, process, elements of: inputting a real image obtained by image sensing the real world (par.23, lines 6-8); inputting position and orientation information of a view point of the user (par.30, line 6); generating a virtual image based on the position and orientation information (par.30, lines 1-6); extracting a virtual image elimination area of the virtual image (par.41,52,53); and combining the virtual image with the real image except for the virtual image elimination area (figure 6, par.78,79), wherein the virtual image elimination area allows the user to observe the corresponding area of the real image which is located behind the virtual image and which normally cannot be observed by the user due to the virtual image being superimposed on the area (par.36,41,78). Abbott teaches the method of a user providing input to the HMD, which tells the system how to display virtual information, in such cases as providing elimination areas of the screen to better view the real world display as disclosed on pages 4-5.

As for dependent claim 4, Abbott teaches the video combining method according to claim 3, wherein in said designated area detection step, the elimination area is detected

from the video image (par.59-60).

As for dependent claim 5, Abbott teaches the video combining method according to claim 4, wherein in said designated area detection step, a marker on the designation means, is detected from the video image, and the elimination area is detected based on a position of the marker in the video image (par.53).

As for dependent claim 6, Abbott teaches the video combining method according to claim 3, further comprising an information input step for inputting a position and orientation information of the designation means, wherein in said designated area detection step, the elimination area is detected from the video image based on the position and orientation information of the designation means (par.45, 58,59).

As for dependent claim 7, Abbott teaches the video combining method according to claim 3, wherein in said designated area detection step, the elimination area is detected from the video image based on information on an area surrounded with a particular color in the video image (par.68, detection means to detect color changing behavior in real world to effect virtual objects).

Note: Abbott teaches how to solve the problem: to remove computer graphics from the real world to better suite the end users' experience so that real world objects of interest are not obstructed by computer graphics placed in the real world. Also Abbott teaches in the same field of endeavor: images and video of real world having that of computer graphics placed in the real world to provide additional information/ data to the end user.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claim 8 is rejected under 35 U.S.C. 103(a) as unpatentable over Abbott (US 2003/0012409).

As for dependent claim 8, Abbott teaches the video combining method according to claim 3, wherein in said designated area detection step, the elimination area is detected

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from the video image based on information on a closed area formed by at least one hand of the user (par.44, line 1). Abbott does not expressly point out the use of a users hand for control in the given scenarios disclosed by Abbott; however Abbott teaches that his system can incorporate the use of finger or glove device (par. 22) to capture user movement among other input methods such as voice recognition which is expressed in par.53 along with eye tracking and "etc" items. It would have been obvious to one of ordinary skill in the art at the time of the invention to include the use of a data finger or data glove device, in view of Abbott, because Abbott suggest a plurality of input devices with his system and discloses scenarios (such as par.53) about his system that makes use of such included list items (voice, eye tracking) from paragraph 22; being that Abbott includes "etc" to his list of input items in one example (par. 53) one of ordinary skill in the art would include the remaining list found in paragraph 22 that includes voice, eye tracking and finger or data glove device to be used for the system in the mentioned examples as well as throughout the entire system.

Note:

It is noted that any citation to specific, pages, columns, lines, or figures in the prior art references and any interpretation of the references should not be considered to be limiting in any way. A reference is relevant for all it contains and may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art. In re Heck, 699 F.2d 1331, 1332-33, 216 USPQ 1038, 1039 (Fed. Cir. 1983) (quoting In re Lemelson, 397 F.2d 1006, 1009, 158 USPQ 275, 277 (CCPA 1968)).

Response to Arguments

Applicant's arguments with respect to claims 1-10 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Inquires

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicholas Augustine whose telephone number is 571-270-1056. The examiner can normally be reached on Monday - Friday: 7:30- 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on 571-272-4847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nicholas Augustine
Examiner
AU: 2179

N. Augustine
June 08, 2007


WEILUN LO
SUPERVISORY PATENT EXAMINER